



STIC Search Report

EIC 2600

STIC Database Tracking Number: 201711

TO: Jefferson Evans
Location: KNOX 8D19
Art Unit : 2627
Monday, September 25, 2006

Case Serial Number: 10/691324

From: Virgil O. Tyler(ASRC)
Location: EIC 2600
KNX-8B68
Phone: 571-272-8536

Virgil.Tyler@uspto.gov

Search Notes

Dear Examiner Evans,

Attached are the search results (from commercial databases) for your case.

Tags mark the patent/articles, which might be of interest. After you review all records including tagged and untagged records, if you wish to order the complete text of any record, please submit request(s) directly to the STIC-EIC 2600 Email Box or hand carry the request to the front desk of the respective EIC.

Please call if you have any questions or suggestions. I have enclosed a Search Results Feedback Form to facilitate further comments or suggestions. Please take a few minutes to share with us your feedback.

Thanks

Virgil O. Tyler

Virgil O. Tyler, CLIN Assistant
Technical Information Specialist
ASRC Aerospace Corporation
EIC 2600





STIC Search Results Feedback Form

EIC 2600

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Pamela Reynolds, EIC 2600 Team Leader
571-272-3505, Knox 8B59

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 2663

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2600 Knox 8B59



File 2:INSPEC 1898-2006/Sep W3
(c) 2006 Institution of Electrical Engineers

File 6:NTIS 1964-2006/Sep W2
(c) 2006 NTIS, Intl Cpyrght All Rights Res

File 8:EI Compendex(R) 1970-2006/Sep W3
(c) 2006 Elsevier Eng. Info. Inc.

File 34:SciSearch(R) Cited Ref Sci 1990-2006/Sep W3
(c) 2006 The Thomson Corp

File 35:Dissertation Abs Online 1861-2006/Aug
(c) 2006 ProQuest Info&Learning

File 56:Computer and Information Systems Abstracts 1966-2006/Sep
(c) 2006 CSA.

File 57:Electronics & Communications Abstracts 1966-2006/Sep
(c) 2006 CSA.

File 65:Inside Conferences 1993-2006/Sep 25
(c) 2006 BLDSC all rts. reserv.

File 94:JICST-EPlus 1985-2006/Jun W3
(c)2006 Japan Science and Tech Corp(JST)

File 95:TEME-Technology & Management 1989-2006/Sep W3
(c) 2006 FIZ TECHNIK

File 99:Wilson Appl. Sci & Tech Abs 1983-2006/Jul
(c) 2006 The HW Wilson Co.

File 144:Pascal 1973-2006/Sep W1
(c) 2006 INIST/CNRS

File 239:Mathsci 1940-2006/Nov
(c) 2006 American Mathematical Society

File 256:TecInfoSource 82-2006/Jan
(c) 2006 Info.Sources Inc

File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
(c) 2002 The Gale Group

File 603:Newspaper Abstracts 1984-1988
(c)2001 ProQuest Info&Learning

File 483:Newspaper Abs Daily 1986-2006/Sep 24
(c) 2006 ProQuest Info&Learning

File 248:PIRA 1975-2006/Sep W1
(c) 2006 Pira International

Set	Items	Description
S1	192492	(MAGNETIC OR DATA) (3N) STORAGE OR HDD OR HARD() (DISC?? OR D-ISK??) () DRIVE?? OR (DISC OR DISK OR HARD) () DRIVE?? OR DSD OR DATA() STORAGE() DEVICE??
S2	939	(BASE OR DECK OR CHASSIS OR PLATFORM OR PLATE??) (3N) S1
S3	91819	PRINTED() CIRCUIT() BOARD?? OR PCB
S4	50356	(STAMP?? OR (PROJECTION OR INJECTION OR OVER) () MOLD??? OR - EXTRUSION OR EXTRUD?) (3N) (METAL??? OR ELASTOMER? OR PLASTIC?? OR ELASTIC OR POLYMER? OR RESILIENT OR FLEXIBL?? OR COMPOSITE-??)
S5	827	(RIGID? OR HARD? OR STIFF??? OR MODULUS (2N) (RIGID? OR ELASTIC?)) (3N) S4
S6	348	AU=(CHEE, W? OR CHEE W? OR JIERAPIPATANAKUL, N? OR JIERAPI-PATANAKUL N? OR NG, Q? OR NG Q?)
S7	4707	VCM OR VOICE() COIL(3N) (MOTOR OR REGION OR AREA)
S8	1388	(MOTOR OR ACTUATOR) (3N) (APERTURE OR DEPRESS? OR RAISED() SURFACE OR INDENT?)
S9	0	S2(3N) S5
S10	0	S2 AND S5
S11	0	S2(3N) S3
S12	2	S2 AND S3
S13	0	S12 NOT (SPILL OR ROBOTICS)
S14	1	S2(3N) (S7 OR S8)
S15	0	S2(3N) S4

S16	0	S2 AND S4
S17	104	S1(3N)S3
S18	0	S17(3N)(S4 OR S5)
S19	0	S17 AND (S4 OR S5)
S20	0	S17 AND (S7 OR S8)
S21	37	S6 AND (S1:S5)
S22	17	RD (unique items)
S23	7	S22 NOT PY>2003
S24	0	S6 AND S17

14/3,K/1 (Item 1 from file: 583)
DIALOG(R) File 583:Gale Group Globalbase(TM)
(c) 2002 The Gale Group. All rts. reserv.

09361530
Cheung Woh Tech heads for Sesdaq
SINGAPORE: CHEUNG WOH TECHNOLOGIES TO BE LISTED
The Straits Times (XBB) 12 Sep 2000 p.75
Language: ENGLISH

...a Sesdaq listing. The company, which currently supplies about 30% of the global market for **voice coil motor (VCM) plates** from the **disk drive** industry, is likely to launch its initial public offer in Singapore by end-September 2000...

23/3,K/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

08443038 INSPEC Abstract Number: B2002-12-3120B-012, C2002-12-5320C-007

Title: Hard disk drive assembly using copper-based shape-memory alloy

Author(s): Huang, W.M.; Gao, X.Y.; Ng, Q. ; Liu, Q.Y.; Kung, H.K.; Liu, X.

Author Affiliation: CMMS, Nanyang Technol. Univ., Singapore, Singapore

Journal: Materials Science Forum Conference Title: Mater. Sci. Forum (Switzerland) vol.394-395 p.95-8

Publisher: Trans Tech Publications,

Publication Date: 2002 Country of Publication: Switzerland

CODEN: MSFOEP ISSN: 0255-5476

SICI: 0255-5476(2002)394/395L:95:HDDA;1-A

Material Identity Number: H866-2002-005

Conference Title: Shape Memory Materials and Its Applications. International Conference on Shape Memory and Superelastic Technologies and Shape Memory and Superelastic Technologies and Shape Memory Materials (SMST-SMM 2001)

Conference Sponsor: Non ferrous Metals Soc. China; Int. Organ. Shape Memory & Superelastic Technol

Conference Date: 2-6 Sept. 2001 Conference Location: Kunming, China

Language: English

Subfile: B C

Copyright 2002, IEE

Title: Hard disk drive assembly using copper-based shape-memory alloy

Author(s): Huang, W.M.; Gao, X.Y.; Ng, Q. ; Liu, Q.Y.; Kung, H.K.; Liu, X.

Abstract: In this paper, we present a study on the assembly of hard disk drives using CuZnAl shape memory alloy to replace the traditional methods by screw and/or adhesives...

...Descriptors: disc drives ;

...Identifiers: hard disk drive assembly

23/3,K/2 (Item 1 from file: 8)

DIALOG(R) File 8:Ei Compendex(R)

(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

05810930 E.I. No: EIP01204958279

Title: Practical frequency shaping of on-track mode controller of HDD servo

Author: Chee, Wonshik ; Kang, Chang-Ik

Corporate Source: Univ of Wisconsin, Milwaukee, WI, United States

Conference Title: Proceedings of the 1999 International Magnetics Conference (INTERMAG '99)

Conference Location: Kyongju, South Korea Conference Date: 19990518-19990521

E.I. Conference No.: 56196

Source: IEEE Transactions on Magnetics v 35 n 5 pt 1 Sep 1999. p 2277-2279

Publication Year: 1999

CODEN: IEMGAQ ISSN: 0018-9464

Language: English

Title: Practical frequency shaping of on-track mode controller of HDD servo

Author: Chee, Wonshik ; Kang, Chang-Ik

23/3,K/3 (Item 2 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

04539104 E.I. No: EIP96100378510

Title: Tribological investigations of tri-pad sliders

Author: Sharma, Vinod; Talke, Frank E.; Ng, Quock

Corporate Source: Univ of California-San Diego, La Jolla, CA, USA

Conference Title: Proceedings of the 1996 IEEE International Magnetics Conference (INTERMAG'96). Part 1 (of 3)

Conference Location: Seattle, WA, USA **Conference Date:** 19960409-19960412

E.I. Conference No.: 45461

Source: IEEE Transactions on Magnetics v 32 n 5 pt 1 Sep 1996. p 3651-3653

Publication Year: 1996

CODEN: IEMGAQ **ISSN:** 0018-9464

Language: English

Author: Sharma, Vinod; Talke, Frank E.; Ng, Quock

Descriptors: *Magnetic heads; Magnetic disk storage ; Tribology; Friction; Coated materials; Acoustic emissions; Surface roughness; Magnetic film storage ; Lubricants; Velocity

23/3,K/4 (Item 3 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

03937660 E.I. No: EIP94091387137

Title: Composition and performance of hydrogenated carbon overcoats on magnetic storage discs

Author: Lauer, J.L.; Blanchet, T.A.; Ng, Quock

Corporate Source: Rensselaer Polytechnic Inst, Troy, NY, USA

Source: S T L E Tribology Transactions v 37 n 3 Jul 1994. p 566-572

Publication Year: 1994

CODEN: TRTRE4 **ISSN:** 0569-8197

Language: English

Title: Composition and performance of hydrogenated carbon overcoats on magnetic storage discs

Author: Lauer, J.L.; Blanchet, T.A.; Ng, Quock

Abstract: Magnetic storage discs overcoated under different conditions with sputtered carbon in the presence of hydrogen were analyzed ...

23/3,K/5 (Item 1 from file: 34)

DIALOG(R)File 34: SciSearch(R) Cited Ref Sci

(c) 2006 The Thomson Corp. All rts. reserv.

03318688 Genuine Article#: NW434 No. References: 8

Title: COMPOSITION AND PERFORMANCE OF HYDROGENATED CARBON OVERCOATS ON MAGNETIC STORAGE DISKS

Author(s): LAUER JL; BLANCHET TA; NG Q

Corporate Source: RENSSELAER POLYTECH INST/TROY//NY/12180; DIGITAL
EQUIPMENT CORP/SHREWSBURY//MA/00000
Journal: TRIBOLOGY TRANSACTIONS, 1994, V37, N3 (JUL), P566-572
ISSN: 0569-8197
Language: ENGLISH Document Type: ARTICLE (Abstract Available)

**Title: COMPOSITION AND PERFORMANCE OF HYDROGENATED CARBON OVERCOATS ON
MAGNETIC STORAGE DISKS**

Author(s): LAUER JL; BLANCHET TA; **NG Q**

Abstract: **Magnetic storage** discs overcoated under different conditions
with sputtered carbon in the presence of hydrogen were analyzed...

23/3,K/6 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2006 The Thomson Corp. All rts. reserv.

01423909 Genuine Article#: GX984 No. References: 0

Title: FLOW DRILLING OF PLASTICS

Author(s): CRAWFORD RJ; KEATING TG; **CHEE WY** ; TAN YL

Corporate Source: QUEENS UNIV BELFAST,SCH MECH & PROC ENGN,ASHBY
BLDG,STRANMILLIS RD/BELFAST BT9 5AH//NORTH IRELAND/

Journal: PLASTICS RUBBER AND COMPOSITES PROCESSING AND APPLICATIONS, 1991
, V16, N4, P263-270

Language: ENGLISH Document Type: ARTICLE (Abstract Available) (NO REFS
KEYED)

Author(s): CRAWFORD RJ; KEATING TG; **CHEE WY** ; TAN YL

...Abstract: of hole in thin steel sheets. As the flow drill passes through
the sheet it **extrudes** plastically deformed **metal** upwards and
downwards at the edge of the hole. The net result is a hole...

23/3,K/7 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2006 Japan Science and Tech Corp(JST). All rts. reserv.

04540025 JICST ACCESSION NUMBER: 00A0095001 FILE SEGMENT: JICST-E
**Slider and Disk Dynamics and Contact Energy During Contact Start Stop in
Hard Disk Drive .**

CHAI M C (1); GAN S (1); ZHANG L H (1); CHANDRA D (1); **NG Q** (1)

(1) Seagate Technol. Int'l

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report
(Institute of Electronics, Information and Communication Enginners),
1999, VOL.99,NO.421(MR99 41-58), PAGE.75-82, FIG.7, REF.3

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 621.3:681.327.1 681.327

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

**Slider and Disk Dynamics and Contact Energy During Contact Start Stop in
Hard Disk Drive .**

CHAI M C (1); GAN S (1); ZHANG L H (1); CHANDRA D (1); **NG Q** (1)

File 344:Chinese Patents Abs Jan 1985-2006/Jan
(c) 2006 European Patent Office
File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)
(c) 2006 JPO & JAPIO
File 350:Derwent WPIX 1963-2006/UD=200660
(c) 2006 The Thomson Corporation
File 371:French Patents 1961-2002/BOPI 200209
(c) 2002 INPI. All rts. reserv.

Set	Items	Description
S1	194610	(MAGNETIC OR DATA) (3N) STORAGE OR HDD OR HARD() (DISC?? OR DISK??) () DRIVE?? OR (DISC OR DISK OR HARD) () DRIVE?? OR DSD OR DATA() STORAGE() DEVICE??
S2	3228	(BASE OR DECK OR CHASSIS OR PLATFORM OR PLATE??) (3N) S1
S3	132375	PRINTED() CIRCUIT() BOARD?? OR PCB
S4	52548	(STAMP?? OR (PROJECTION OR INJECTION OR OVER) () MOLD??? OR - EXTRUSION OR EXTRUD?) (3N) (METAL??? OR ELASTOMER? OR PLASTIC?? OR ELASTIC OR POLYMER? OR RESILIENT OR FLEXIBL?? OR COMPOSITE-??)
S5	666	(RIGID? OR HARD? OR STIFF??? OR MODULUS (2N) (RIGID? OR ELASTIC?)) (3N) S4
S6	75	AU=(CHEE, W? OR CHEE W? OR JIERAPIPATANAKUL, N? OR JIERAPIPATANAKUL N? OR NG, Q? OR NG Q?)
S7	4433	VCM OR VOICE() COIL(3N) (MOTOR OR REGION OR AREA)
S8	2616	(MOTOR OR ACTUATOR) (3N) (APERTURE OR DEPRESS? OR RAISED() SURFACE OR INDENT?)
S9	1763	(BASE OR DECK OR CHASSIS OR PLATFORM OR PLATE??) (3N) (S4 OR S5)
S10	0	S9(3N) (S7 OR S8)
S11	4	S9 AND (S7 OR S8)
S12	2	S9(3N) S1
S13	2	S12 NOT S11
S14	5	S9(3N) S3
S15	5	S14 NOT (S11:S13)
S16	5	S15 NOT AD=20031022:20060925/PR
S17	1	S9 AND S6
S18	0	S17 NOT (S11:S16)
S19	44	S6 AND (S1:S5)
S20	5	S19(3N) (S7 OR S8)
S21	5	S20 NOT (S11:S16)

11/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0015065672 - Drawing available
WPI ACC NO: 2005-414904/200542
XRAM Acc No: C2005-127172
XRPX Acc No: N2005-336299

Base deck for data storage device, comprises platform portion supporting over-mold portion

Patent Assignee: CHEE W (CHEE-I); JIERAPIPATANAKUL N (JIER-I); NG Q (NGQO-I); SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: CHEE W; JIERAPIPATANAKUL N; NG Q; ONN C W; YING N Q

Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 20050088777	A1	20050428	US 2003691324	A	20031022	200542	B
SG 115577	A1	20051028	SG 20036346	A	20031022	200622	E

Priority Applications (no., kind, date): US 2003691324 A 20031022

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20050088777	A1	EN	11	6	
SG 115577	A1	EN			

Alerting Abstract ...150 Motor mount aperture

Technology Focus

...relief region (160), voil coil relief region, and recirculation filter reception region (162). The first **depression** encloses a **motor mount aperture** (150). The **motor mount aperture** mounts a **motor**. The second **depression** is adjacent the first **depression** confining an **actuator mount aperture**. The **actuator mount aperture** mounts an **actuator**. The disc relief region is adjacent the first centrally located depression. The disc relief region accommodates rotation of disc. The **voice coil relief region** is adjacent the second peripheral located depression. The **voice coil relief region** accommodates rotation of the actuator. The recirculation filter reception region is adjacent the first located...

...top cover gasket supported by the top surface, motor gasket supported by the first located **depression** and adjacent the **motor mount aperture**, **actuator** gasket supported by the second peripheral **depression** and adjacent the **actuator mount aperture**, and impact dissipation mechanism connected with the top surface as well as the external surface...

...Preferred Methods: The platform portion is made by stamping process, or fine blanking process. The **platform** portion is **over - molded** with two **polymer** using forming **platform** portion of the base deck, placing formed platform portion in mold cavity, injecting first polymer...

...component in cure oven, and curing the over-molded elastomeric component to form the base **deck**. Preferred Parameters: The **over - molded** epoxidized **elastomer** component is cured at 150(deg)C for 2 hours.

Original Publication Data by Authority

Original Abstracts:

A base deck for a data storage device is preferably formed from a **stamped**

, or fine blanked **metallic platform** portion, which supports an over-mold portion. The over-mold portion is a combination of...

11/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0013085161 - Drawing available
WPI ACC NO: 2003-165768/200316
XRPX Acc No: N2003-130884

Beam damper for voice coil motor of disk drive, has series of flex beams extending from flat platform engaging with upper pole of motor to resiliently bias top cover of disk drive away from upper pole
Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)
Inventor: HEATON D M; STRICKLIN J D; TRAMMELL C A; TRELEVEN G A; WOOD R L
Patent Family (7 patents, 7 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20020135945	A1	20020926	US 2001277784	P	20010321	200316 B
			US 2001925358	A	20010809	
WO 2002078000	A1	20021003	WO 2001US24987	A	20010809	200316 E
US 6603633	B2	20030805	US 2001925358	A	20010809	200353 E
GB 2389699	A	20031217	WO 2001US24987	A	20010809	200407 E
			GB 200322151	A	20030922	
KR 2003080098	A	20031010	KR 2003712280	A	20030920	200413 E
CN 1505818	A	20040616	CN 2001823182	A	20010809	200465 E
JP 2005500635	W	20050106	WO 2001US24987	A	20010809	200505 E
			JP 2002575950	A	20010809	

Priority Applications (no., kind, date): US 2001277784 P 20010321; US 2001925358 A 20010809

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20020135945	A1	EN	10	7	Related to Provisional US 2001277784
WO 2002078000	A1	EN			
National Designated States,Original: CN DE GB JP KR SG					
GB 2389699	A	EN			PCT Application WO 2001US24987
					Based on OPI patent WO 2002078000
JP 2005500635	W	JA	28		PCT Application WO 2001US24987
					Based on OPI patent WO 2002078000

Beam damper for voice coil motor of disk drive, has series of flex beams extending from flat platform engaging with upper...

Alerting Abstract ...NOVELTY - The beam damper (140) arranged between an upper pole (134) of a **voice coil motor** (106) and a top cover (104) of a disk drive (100), has a flat platform...
...USE - For damping acoustic noise generated in **voice coil motor** of disk drive (claimed) used in computer...

...106 **Voice coil motor**

Original Publication Data by Authority

Original Abstracts:

...to the actuator motor. The beam damper is preferably formed from a sheet

of ductile **metal** which is **stamped** to form the **platform** and flex beams, after which the flex beams are bent to the desired angle...

...to the actuator motor. The beam damper is preferably formed from a sheet of ductile **metal** which is **stamped** to form the **platform** and flex beams, after which the flex beams are bent to the desired angle...

...actuator motor (126). The beam damper (140) is preferably formed from a sheet of ductile **metal** which is **stamped** to form the **platform** (148) and flex beams (150), after which the flex beams (150) are bent to the...

Claims:

What is claimed is: b 1 /b . A beam damper for a **voice coil motor** of a disc drive, the disc drive having a top cover and the **voice coil motor** having a magnetically permeable upper pole wherein the beam damper is between the upper pole...

...upper pole to resiliently bias the top cover away from the upper pole of the **voice coil motor** .

...

...What is claimed is:1. A beam damper for a **voice coil motor** of a disc drive, the disc drive having a top cover and the **voice coil motor** having a magnetically permeable upper pole wherein the beam damper is between the upper pole...

...upper pole to resiliently bias the top cover away from the upper pole of the **voice coil motor**.

11/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0011135905 - Drawing available

WPI ACC NO: 2002-072581/

XRPX Acc No: N2002-054307

Disk drive e.g. hard, floppy disk drives arranges back yoke of magnet on specific area of base board formed by press stamping

Patent Assignee: SANKYO SEIKI MFG CO LTD (SAOB)

Inventor: SEICHI M; TAGO T

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 2001325777	A	20011122	JP 2000141159	A	20000515	200210 B

Priority Applications (no., kind, date): JP 2000141159 A 20000515

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 2001325777	A	JA	4	2	

Alerting Abstract ...NOVELTY - A **voice coil motor** (20) is attached to a **base board** (2) press- **stamped** with a magnetic **metal plate** . An area (22) for positioning a magnet (18) is formed on base board by press...
...such that the back yoke of the magnet is positioned on the base board.
The **voice coil** (16) of the **motor** is arranged on both sides of the magnet....20 **Voice coil motor**

11/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0010043773 - Drawing available

WPI ACC NO: 2000-348935/200030

XRAM Acc No: C2000-106026

XRPX Acc No: N2000-261335

Miniature removable magnetic recording disk drive, e.g. for digital cameras, has a composite sheet metal/plastic base with elastomeric corner bumpers and top and bottom covers enclosing plate-mounted electronic components

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ALBRECHT T R; KHANNA V; KHANNA V D; KUMAR S; SRI-JAYANTHA S M

Patent Family (3 patents, 3 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
US 6034841	A	20000307	US 199887336	A	19980529	200030 B
SG 77235	A1	20001219	SG 19992230	A	19990511	200106 E
PH 1199900970	B1	20040826	PH 1999970	A	19990428	200619 E

Priority Applications (no., kind, date): US 199887336 A 19980529

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6034841	A	EN	11	9	
SG 77235	A1	EN			
PH 1199900970	B1	EN			

Alerting Abstract ...perimeter plastic frame to a sheet metal plate (12) with flanges containing holes. A spindle **motor**, magnetic recording disk, **voice coil motor** actuator, read/write head and electronics card are attached to the plate at mountings, e...

...The disk drive meets the Compact Flash type II form factor and interface specifications. The **injection molded plastic** encapsulates the **base plate** flanges and mechanically interlocks the frame and plate through the flange holes. Use of filled...

Original Publication Data by Authority

Original Abstracts:

...for supporting the disk drive components, e.g., the spindle motor with attached disk, the **voice coil motor** actuator with attached read/write head, and the preamplifier/write driver electronics module. The composite ...

...surrounds the perimeter of the metal plate. The metal plate supports the disk drive spindle **motor** and **voice coil motor** actuator and is made of high magnetic permeability, low coercivity material so that it can...

Claims:

...of the metal plate;a magnetic recording disk attached to and rotatable by the spindle **motor**;a **voice coil motor** actuator attached to said first side of the metal plate;a head attached to and...

13/3,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0013058207 - Drawing available

WPI ACC NO: 2003-137929/200313

XRPX Acc No: N2003-109341

Base plate for magnetic disc drive, includes over-molded plastic drive structural component which is positioned on depression secured on metal platform

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: DAGUE W A; STEFANSKY F M

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6426847	B1	20020730	US 1999130281	P	19990421	200313 B
			US 2000487235	A	20000119	

Priority Applications (no., kind, date): US 1999130281 P 19990421; US 2000487235 A 20000119

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6426847	B1	EN	9	5	Related to Provisional US 1999130281

Original Publication Data by Authority

Claims:

...comprising:a metal platform portion having a top surface and a bottom surface; anda **plastic disc** drive structural **component over**-molded onto the **metal** platform portion to secure the plastic structural component to the metal platform portion wherein the...

13/3,K/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0012669391

WPI ACC NO: 2002-519458/200255

Related WPI Acc No: 2001-136549; 2003-030332

XRPX Acc No: N2002-411156

Method of producing a tamper proof item using a resinous base onto which is attached a lens formed in a transparent resinous layer with a metallized hologram on its lower surface into which information is placed using heat

Patent Assignee: CURIEL Y (CURI-I)

Inventor: CURIEL Y

Patent Family (13 patents, 98 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2002042994	A1	20020530	WO 2001US43463	A	20011121	200255 B
AU 200228617	A	20020603	AU 200228617	A	20011121	200263 E
NO 200302298	A	20030710	WO 2001US43463	A	20011121	200353 E
			NO 20032298	A	20030521	
BR 200115633	A	20030909	BR 200115633	A	20011121	200369 E
			WO 2001US43463	A	20011121	
EP 1356427	A1	20031029	EP 2001989731	A	20011121	200379 E
			WO 2001US43463	A	20011121	

US 6655598	B1	20031202	US 199819509	A	19980205	200379	E
			US 2000723178	A	20001127		
JP 2004514937	W	20040520	WO 2001US43463	A	20011121	200434	E
			JP 2002545442	A	20011121		
CN 1488121	A	20040407	CN 2001822312	A	20011121	200441	E
AU 2002228617	B2	20040909	AU 2002228617	A	20011121	200479	E
NZ 526034	A	20041126	NZ 526034	A	20011121	200479	E
			WO 2001US43463	A	20011121		
ZA 200304832	A	20050426	ZA 20034832	A	20030620	200532	E
MX 2003004716	A1	20050201	WO 2001US43463	A	20011121	200564	E
			MX 20034716	A	20030527		
IN 200300934	P4	20050422	NO 20031410	A	20030327	200642	E
			IN 2003CN934	A	20030613		

Priority Applications (no., kind, date): US 199819509 A 19980205; US 2000723178 A 20001127

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
WO 2002042994	A1	EN	42	16		
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZM ZW						
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW						
AU 200228617	A	EN			Based on OPI patent	WO 2002042994
NO 200302298	A	NO			PCT Application	WO 2001US43463
BR 200115633	A	PT			PCT Application	WO 2001US43463
					Based on OPI patent	WO 2002042994
EP 1356427	A1	EN			PCT Application	WO 2001US43463
					Based on OPI patent	WO 2002042994
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR						
US 6655598	B1	EN			C-I-P of application	US 199819509
					C-I-P of patent	US 6164548
JP 2004514937	W	JA	61		PCT Application	WO 2001US43463
					Based on OPI patent	WO 2002042994
AU 2002228617	B2	EN			Previously issued patent	AU 2002228617
					Based on OPI patent	WO 2002042994
NZ 526034	A	EN			PCT Application	WO 2001US43463
					Based on OPI patent	WO 2002042994
ZA 200304832	A	EN	46			
MX 2003004716	A1	ES			PCT Application	WO 2001US43463
					Based on OPI patent	WO 2002042994
IN 200300934	P4	EN			PCT Application	NO 20031410

Original Publication Data by Authority

Original Abstracts:

...are disclosed. In one embodiment, a tamper resistant informational article is provided by creating a **base** with an elongated **metal** core having **extruded** therearound a resinous **plastic** material. A **magnetic** media **storage** element is secured to this base. An antenna may be provided. In another embodiment, a...

16/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0014956246 - Drawing available
WPI ACC NO: 2005-304021/200531
XRPX Acc No: N2005-248663

Electric connector for connecting integrated circuit with printed circuit board, has load plate stamped from metal sheet to form protrusion having outer edge coined to weed out burrs after stamping load plate

Patent Assignee: HUANG H Y (HUAN-I); MA H (MAHH-I)
Inventor: HUANG H Y; MA H

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20050064742	A1	20050324	US 2004946183	A	20040920	200531 B

Priority Applications (no., kind, date): TW 2003216903 A 20030919

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20050064742	A1	EN	10	6	

Electric connector for connecting integrated circuit with printed circuit board, has load plate stamped from metal sheet to form protrusion having outer edge coined to weed out burrs after stamping load
...

16/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0014354524 - Drawing available
WPI ACC NO: 2004-543038/200452
XRPX Acc No: N2004-429363

Heat-dissipating casing for electronic apparatus, has openings formed to casing body and covered by side plates individually formed with holes that receive socket and terminal, respectively

Patent Assignee: DELTA ELECTRONICS INC (DELT-N)
Inventor: CHU S; HSI-AN L; LIU H; YANG I

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20040144527	A1	20040729	US 2003434208	A	20030509	200452 B
US 6820686	B2	20041123	US 2003434208	A	20030509	200477 E

Priority Applications (no., kind, date): US 2003434208 A 20030509; TW 2003201318 U 20030124

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040144527	A1	EN	10	5	

Original Publication Data by Authority

Original Abstracts:

...a first opening and a second opening, wherein the space is used for

receiving the **printed circuit board** , a first side **plate** fixed to the **metal extruded** casing to cover the first opening and having a first hole for securing the input...

...a first opening and a second opening, wherein the space is used for receiving the **printed circuit board** , a first side **plate** fixed to the **metal extruded** casing to cover the first opening and having a first hole for securing the input...

Claims:

...a first opening and a second opening, wherein said space is provided for receiving said **printed circuit board** ;a first side **plate** fixed to said **metal extruded** casing to cover said first opening and having a first hole for securing said input...

...space, a first opening and a second opening, wherein said space is provided for receiving said **printed circuit board**;a first **side** plate fixed to said **metal extruded** casing to cover said first opening and having a first hole for securing said...

16/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0007827072 - Drawing available

WPI ACC NO: 1996-455855/

XRPX Acc No: N1996-384098

Arrangement of drawer in frame for vehicular air bag controller - has edges of foam-coated metallic circuit carrier guided into longitudinal grooves of frame which overlaps in direction of withdrawal

Patent Assignee: SIEMENS AG (SIEI)

Inventor: BIEREK N; DIRMEYER J; PLANKL C

Patent Family (9 patents, 19 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1996031104	A1	19961003	WO 1996DE424	A	19960308	199645 B
DE 19512255	A1	19961002	DE 19512255	A	19950331	199645 E
EP 818133	A1	19980114	EP 1996904754	A	19960308	199807 E
			WO 1996DE424	A	19960308	
JP 10505958	W	19980609	JP 1996528757	A	19960308	199833 E
			WO 1996DE424	A	19960308	
EP 818133	B1	19990915	EP 1996904754	A	19960308	199942 E
			WO 1996DE424	A	19960308	
DE 59603077	G	19991021	DE 59603077	A	19960308	199950 E
			EP 1996904754	A	19960308	
			WO 1996DE424	A	19960308	
KR 1998703259	A	19981015	WO 1996DE424	A	19960308	199950 E
			KR 1997706663	A	19970924	
US 6123565	A	20000926	WO 1996DE424	A	19960308	200051 E
			US 1997940469	A	19970930	
KR 404238	B	20040124	WO 1996DE424	A	19960308	200428 E
			KR 1997706663	A	19970924	

Priority Applications (no., kind, date): DE 19512255 A 19950331

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
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WO 1996031104	A1	DE	15	6	
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National Designated States,Original: JP KR US

Regional Designated States,Original: AT BE CH DE DK ES FI FR GB GR IE IT

LU MC NL PT SE
 DE 19512255 A1 DE 5 6
 EP 818133 A1 DE PCT Application WO 1996DE424
 Based on OPI patent WO 1996031104
 Regional Designated States,Original: DE FR GB IT
 JP 10505958 W JA 12 PCT Application WO 1996DE424
 Based on OPI patent WO 1996031104
 EP 818133 B1 DE PCT Application WO 1996DE424
 Based on OPI patent WO 1996031104
 Regional Designated States,Original: DE FR GB IT
 DE 59603077 G DE Application EP 1996904754
 PCT Application WO 1996DE424
 Based on OPI patent EP 818133
 Based on OPI patent WO 1996031104
 KR 1998703259 A KO PCT Application WO 1996DE424
 Based on OPI patent WO 1996031104
 US 6123565 A EN Continuation of application WO
 1996DE424
 KR 404238 B KO PCT Application WO 1996DE424
 Previously issued patent KR 98003259
 Based on OPI patent WO 1996031104

Original Publication Data by Authority

Original Abstracts:

...motor-vehicle control unit having an electrical circuit on a support,
 which may be a **printed circuit board** or **metal plate** with **stamped**
 conductors. The motor-vehicle control unit includes a plug-in body
 encasing components of the...

16/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0006048627

WPI ACC NO: 1992-285555/

XRPX Acc No: N1992-218541

**Electronic module with metal housing - has heat sink for semiconductor
 components of PCB by base , stamp and resilient disc**

Patent Assignee: ANT NACHRICHTENTECHNIK GMBH (BOSC)

Inventor: BETSCH W; DIERCKS H P

Patent Family (2 patents, 1 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
DE 4104888	A	19920820	DE 4104888	A	19910218	199235 B
DE 4104888	C2	19940908	DE 4104888	A	19910218	199434 E

Priority Applications (no., kind, date): DE 4104888 A 19910218

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
DE 4104888	A	DE	9	6	
DE 4104888	C2	DE	10	6	

**...has heat sink for semiconductor components of PCB by base , stamp
 and resilient disc**

16/3,K/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0003482282

WPI ACC NO: 1985-257436/

Keyboard with multi-cell metal support plate - has stamped round apertures with local recesses, and modular interrupter and-or indicator in transverse chamber

Patent Assignee: TELEMECANIQUE ELECTRIQUE (MCQN)

Inventor: BACON R; BOUYER P

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
DE 3511359	A	19851010	DE 3511359	A	19850328	198542 B
FR 2562286	A	19851004	FR 19845178	A	19840328	198546 E
DE 3511359	C2	19940511	DE 3511359	A	19850328	199417 E

Priority Applications (no., kind, date): FR 19845178 A 19840328

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
DE 3511359	A	DE	13	4	
DE 3511359	C2	DE	6	4	

Alerting Abstract ...a modular interruptor and/or indicator, whose leads are coupled to conductive tracks of a **printed circuit board**. The thin **metal support plate** has **stamped** apertures, each with a circular contour (5) with a local recess (6). Each modular interruptor...

21/3,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0013855173 - Drawing available

WPI ACC NO: 2004-033477/200403

Related WPI Acc No: 2005-329832

XRPX Acc No: N2004-026570

Disc drive for computer, has voice coil of voice coil motor assembly that is positioned between bottom pole mounted to base plate and top pole piece over-molded within moldable top cover

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: CHEE W; JIERAPIPATANAKUL N; ONG B; TEO J Y

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20030218827	A1	20031127	US 2002383035	P	20020523	200403 B
			US 2002326790	A	20021220	

Priority Applications (no., kind, date): US 2002383035 P 20020523; US 2002326790 A 20021220

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20030218827	A1	EN	13	5	Related to Provisional US 2002383035

Disc drive for computer, has voice coil of voice coil motor assembly that is positioned between bottom pole mounted to base plate and top pole piece...

21/3,K/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0013843972 - Drawing available

WPI ACC NO: 2004-021750/

XRPX Acc No: N2004-016746

Disk drive for computer, has flexible clamp fastened to base and secured to other end of flexible cable to base with clamp arm retaining bottom pole of voice coil motor between clamp arm and base

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: CHEE W; JIERAPIPATANAKU N; JIERAPIPATANAKUL N; KOONG J S J; LIM K M K; SEETOH C; SEETOH C W

Patent Family (3 patents, 7 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20030214758	A1	20031120	US 2002382147	P	20020520	200402 B
			US 2002321169	A	20021216	
WO 2003100771	A1	20031204	WO 2002US32376	A	20021010	200406 E
WO 2003100772	A1	20031204	WO 2002US40348	A	20021216	200406 E

Priority Applications (no., kind, date): US 2002382147 P 20020520; US 2002321169 A 20021216

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20030214758	A1	EN	9	5	Related to Provisional US 2002382147
WO 2003100771	A1	EN			

National Designated States,Original: CN DE GB JP KR SG VC

WO 2003100772 A1 EN
National Designated States,Original: CN DE GB JP KR SG

Original Titles:

Flex clamp in a **disc drive** for retaining a **voice coil motor**
magnetic pole on a base...

...FLEX CLAMP IN A **DISC DRIVE** FOR RETAINING A **VOICE COIL MOTOR**
MAGNETIC POLE ON A BASE...

...FLEX CLAMP IN A **DISC DRIVE** FOR RETAINING A **VOICE COIL MOTOR**
MAGNETIC POLE ON A BASE...

Original Publication Data by Authority

Original Abstracts:

...is able to move a transducer head over a data surface of a disc. The **disc drive** also includes a **voice coil motor** that is able to rotate the actuator assembly. The voice coil motor includes a bottom...

...is able to move a transducer head over a data surface of a disc. The **disc drive** also includes a **voice coil motor** that is able to rotate the actuator assembly. The voice coil motor includes a bottom...

...is able to move a transducer head over a data surface of a disc. The **disc drive** also includes a **voice coil motor** that is able to rotate the actuator assembly. The voice coil motor includes a bottom...

21/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0013800868 - Drawing available

WPI ACC NO: 2003-900966/200382

XRPX Acc No: N2003-719345

Integrated latch/ voice - coil - motor magnet assembly for disk drive , includes lower plate having elongate slot to which stem of latching element is engaged

Patent Assignee: CHEE W (CHEE-I); JIERAPIPATANAKUL N (JIER-I); ONG B (ONGB-I); SEAGATE TECHNOLOGY LLC (SEAG-N); SOH K (SOHK-I)

Inventor: CHEE W; JIERAPIPATANAKUL N; ONG B; ONN C W; SENG O B; SOH K; TONG S K

Patent Family (3 patents, 2 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
US 20030206377	A1	20031106	US 2000212543	P	20000620	200382 B
			US 2001815748	A	20010323	
SG 100653	A1	20031226	SG 20011840	A	20010323	200414 E
US 6717775	B2	20040406	US 2001815748	A	20010323	200425 E

Priority Applications (no., kind, date): US 2000212543 P 20000620; US 2001815748 A 20010323

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20030206377	A1	EN	8	5	Related to Provisional US 2000212543
SG 100653	A1	EN			

Integrated latch/ voice - coil - motor magnet assembly for disk drive ,

includes lower plate having elongate slot to which stem of latching element is engaged

Alerting Abstract USE - Integrated latch/ voice - coil - motor magnet assembly for disk drive .

Original Publication Data by Authority

Original Abstracts:

...provides an integrated magnetic latch and voice coil motor magnet assembly for use in a **disc drive** . The lower **plate** of the **voice coil motor** defines an elongate slot that is configured for engagement with a latch member. The latch...

...provides an integrated magnetic latch and voice coil motor magnet assembly for use in a **disc drive** . The lower **plate** of the **voice coil motor** defines an elongate slot that is configured for engagement with a latch member. The latch...

21/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0012371931 - Drawing available

WPI ACC NO: 2002-314888/

XRAM Acc No: C2002-091524

XRPX Acc No: N2002-246498

Voice coil motor used in disc drive for data storage, includes overmold encapsulating magnet and pole

Patent Assignee: CHEE W O (CHEE-I); NIROOT J (NIRO-I); OOI T K (OOIT-I);

SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: CHEE W O; NIROOT J; OOI T K

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20020015263	A1	20020207	US 2000222992	P	20000804	200235 B
			US 2001885384	A	20010620	
US 6735054	B2	20040511	US 2001885384	A	20010620	200431 E
SG 103299	A1	20040429	SG 20013760	A	20010620	200433 E

Priority Applications (no., kind, date): US 2000222992 P 20000804; US 2001885384 A 20010620

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20020015263	A1	EN	8	7	Related to Provisional US 2000222992
SG 103299	A1	EN			

Voice coil motor used in disc drive for data storage, includes overmold encapsulating magnet and pole

Original Publication Data by Authority

Claims:

...What is claimed is:11. A disc drive comprising: a voice coil motor comprising:a first magnet having a magnetic field;a first pole having a contact...

21/3,K/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0012297753 - Drawing available
WPI ACC NO: 2002-238883/
XRPX Acc No: N2002-184149

**Actuator assembly for optical disk drive , includes actuator circuit
with alignment aperture which receives projecting pin of actuator arm
when fastened to actuator arm**

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)
Inventor: CHEE W; LIEM A Y; NIROOT J; SEETOH C; TOH M J
Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20010053047	A1	20011220	US 2000212216	P	20000616	200229 B
			US 2000212541	P	20000620	
			US 2001879359	A	20010611	
US 6765763	B2	20040720	US 2001879359	A	20010611	200448 E

Priority Applications (no., kind, date): US 2000212541 P 20000620; US
2000212216 P 20000616; US 2001879359 A 20010611

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20010053047	A1	EN	12	5	Related to Provisional US 2000212216 Related to Provisional US 2000212541

**Actuator assembly for optical disk drive , includes actuator circuit
with alignment aperture which receives projecting pin of actuator arm
when fastened to actuator arm**

File 348:EUROPEAN PATENTS 1978-2006/ 200638

(c) 2006 European Patent Office

File 349:PCT FULLTEXT 1979-2006/UB=20060921UT=20060914

(c) 2006 WIPO/Thomson

Set	Items	Description
S1	127019	(MAGNETIC OR DATA) (3N) STORAGE OR HDD OR HARD() (DISC?? OR DISK??) () DRIVE?? OR (DISC OR DISK OR HARD) () DRIVE?? OR DSD OR DATA() STORAGE() DEVICE??
S2	2265	(BASE OR DECK OR CHASSIS OR PLATFORM OR PLATE??) (3N) S1
S3	48114	PRINTED() CIRCUIT() BOARD?? OR PCB
S4	48889	(STAMP?? OR (PROJECTION OR INJECTION OR OVER) () MOLD??? OR - EXTRUSION OR EXTRUD?) (3N) (METAL??? OR ELASTOMER? OR PLASTIC?? OR ELASTIC OR POLYMER? OR RESILIENT OR FLEXIBL?? OR COMPOSITE??)
S5	898	(RIGID? OR HARD? OR STIFF??? OR MODULUS (2N) (RIGID? OR ELASTIC?)) (3N) S4
S6	20	AU=(CHEE, W? OR CHEE W? OR JIERAPIPATANAKUL, N? OR JIERAPIPATANAKUL N? OR NG, Q? OR NG Q?)
S7	3640	VCM OR VOICE() COIL(3N) (MOTOR OR REGION OR AREA)
S8	3880	(MOTOR OR ACTUATOR) (3N) (APERTURE OR DEPRESS? OR RAISED() SURFACE OR INDENT?)
S9	1725	(BASE OR DECK OR CHASSIS OR PLATFORM OR PLATE??) (3N) (S4 OR S5)
S10	0	S9(3N) (S7 OR S8)
S11	1	S9(60N) (S7 OR S8)
S12	2	S9(3N) S1
S13	2	S12 NOT S11
S14	1	S9(3N) S3
S15	1	S14 NOT S11:S13
S16	0	S15 NOT PRINthead
S17	6	S6 AND IC=G11B?
S18	6	S17 NOT AD=20031022:20060925/PR
S19	2	S18 NOT (FILTER OR LUBRICANT??)
S20	0	S9 AND S6

11/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01431465

Assembly method for a voice coil motor

Verfahren zum Zusammenbau eines Schwingspulenmotors

Methode d'assemblage pour un moteur a bobine mobile

PATENT ASSIGNEE:

Advanced Materials Technologies, Pte Ltd., (2976850), 100 Jurong East St.
21, Singapore Technologies Bld., Singapore 609602, (SG), (Applicant
designated States: all)

INVENTOR:

Chee-Tian, Yeo, 20 Seletar Terrace, 806821 Singapore, (SG)

LEGAL REPRESENTATIVE:

Schuffenecker, Thierry (9206931), 120 Chemin de la Maure, 06800 Cagnes
sur Mer, (FR)

PATENT (CC, No, Kind, Date): EP 1209666 A1 020529 (Basic)

APPLICATION (CC, No, Date): EP 2001640003 010903;

PRIORITY (CC, No, Date): US 721721 001127

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS (V7): G11B-005/55; G11B-025/04; H02K-041/00;
H02K-033/00; G11B-005/48

ABSTRACT WORD COUNT: 149

NOTE:

Figure number on first page: 4A

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200222	1291
SPEC A	(English)	200222	2444
Total word count - document A			3735
Total word count - document B			0
Total word count - documents A + B			3735

...CLAIMS formed by metal injection molding has integrated three of four
structural elements of a standard **voice coil motor** and reduced
inventory management.

9. The interlocking assembly according to Claim 7 wherein said **metal
injection molding** of said arcuate **base** member provides a
reduction of a gap between the magnet and plate thereby permitting a
more intense magnetic flux between the gap.

10. An interlocking assembly of a **voice coil motor** for a hard disk
drive, said assembly comprising:
an arcuate shaped base member with a...

...formed by metal injection molding thus integrating three of four
structural elements of a standard **voice coil motor** thereby
reducing inventory management.

12. The interlocking assembly according to Claim 10 wherein said metal...

...use of fasteners or adhesives.

13. The interlocking assembly according to Claim 10 wherein said **metal
injection molding** of said arcuate **base** member provides a
reduction of a gap between the magnet and plate thereby permitting a
more intense magnetic flux between the gap.

14. An interlocking assembly of a **voice coil motor** for a hard disk

drive, said assembly comprising:
an arcuate shaped base member with a...

13/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2006 European Patent Office. All rts. reserv.

00760674

Casing base for hard disc drive device and method of manufacture therefor
Gehäuse Grundplatte für Festplattenantriebsgerät und Verfahren zur
Herstellung desselben
Base de boîtier pour dispositif d'entraînement de disque dur et sa méthode
de fabrication

PATENT ASSIGNEE:

MINEBEA KABUSHIKI-KAISHA, (970871), 73-4106 Miyota Oaza, Miyota-cho,
Kitasaku-gun, Nagano-ken, (JP), (Proprietor designated states: all)

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Obara, Rikuro, c/o Minebea K.K., 4106-73 Oaza-Miyota, Miyota-cho,
Kitasaku-ku Nagano-ken, (JP)

LEGAL REPRESENTATIVE:

Bankes, Stephen Charles Digby et al (47701), BARON & WARREN 18 South End
Kensington, London W8 5BU, (GB)

PATENT (CC, No, Kind, Date): EP 715309 A2 960605 (Basic)

EP 715309 A3 960904

EP 715309 B1 000308

APPLICATION (CC, No, Date): EP 95308029 951109;

PRIORITY (CC, No, Date): JP 94317670 941128

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS (V7): G11B-033/02

ABSTRACT WORD COUNT: 161

NOTE:

Figure number on first page: 4

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200010	203
CLAIMS B	(German)	200010	205
CLAIMS B	(French)	200010	255
SPEC B	(English)	200010	964
Total word count - document A			0
Total word count - document B			1627
Total word count - documents A + B			1627

...CLAIMS The method of any preceding claim wherein the metal is a light metal.

7. A **hard disc drive casing base** (1) including an **extrusion** molded **metal** member cut to length and formed with necessary holes (3a...3e) and a pressed recessed...

13/3,K/2 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00495053

SHEET METAL BASE FOR VIDEO DISK DRIVE
BLOC MATIERE EN TOLE POUR LECTEUR DE VIDEODISQUE

Patent Applicant/Assignee:

CASTLEWOOD SYSTEMS INC,
KHUU Hong,

Inventor(s):

KHUU Hong,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9926405 A2 19990527

Application: WO 98US24207 19981113 (PCT/WO US9824207)

Priority Application: US 97971033 19971114

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

JP US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 6641

Fulltext Availability:

Claims

Claim

... engage the positioning surfaces of the cartridge to position the cartridge within the receptacle, the **base** comprising **stamped sheet metal** .

4 A **disk drive** as claimed in claim 3, wherein the base is substantially composed of stamped steel, the..

19/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01070471 **Image available**

**FLEX CLAMP IN A DISC DRIVE FOR RETAINING A VOICE COIL MOTOR MAGNETIC POLE
ON A BASE**

**BRIDE SOUPLE CONTENUE DANS UN LECTEUR DE DISQUE DESTINE A RETENIR UN POLE
MAGNETIQUE DE MOTEUR A BOBINE MOBILE**

Patent Applicant/Assignee:

SEAGATE TECHNOLOGY LLC, 920 Disc Drive, Scotts Valley, CA 95066, US, US
(Residence), US (Nationality)

Inventor(s):

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JIERAPIPATANAKU Niroot, Block 137 Sunset Way #05-02, Singapore 597159, SG

Legal Representative:

BUENZOW Jennifer Marie (agent), Seagate Technology LLC, Intellectual
Property-SHK2LG, 1280 Disc Drive, Shakopee, MN 55379-1863, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2003100772 A1 20031204 (WO 03100772)

Application: WO 2002US40348 20021216 (PCT/WO US0240348)

Priority Application: US 2002382147 20020520

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

CN DE GB JP KR SG

Publication Language: English

Filing Language: English

Fulltext Word Count: 3850

Inventor(s):

... **CHEE WaiOnn**

Main International Patent Class (v7): **G11B-005/48**

19/3,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2006 WIPO/Thomson. All rts. reserv.

01070469 **Image available**

**FLEX CLAMP IN A DISC DRIVE FOR RETAINING A VOICE COIL MOTOR MAGNETIC POLE
ON A BASE**

**AGRAFE FLEXIBLE MAINTENANT DANS UNE UNITE DE DISQUE DUR LE POLE MAGNETIQUE
D'UN MOTEUR A BOBINE MOBILE SUR LA BASE**

Patent Applicant/Assignee:

SEAGATE TECHNOLOGY LLC, 920 Disc Drive, Scotts Valley, CA 95066, US, US
(Residence), US (Nationality)

Inventor(s):

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520401, SG,

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, SG,

Legal Representative:

CESARI Kirk A (agent), Seagate Technology LLC, Intellectual Property -
SHK2LG, 1280 Disc Drive, Shakopee, MN 55379-1863, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2003100771 A1 20031204 (WO 03100771)

Application: WO 2002US32376 20021010 (PCT/WO US0232376)

Priority Application: US 2002382147 20020520

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

CN DE GB JP KR SG VC

Publication Language: English

Filing Language: English

Fulltext Word Count: 4548

Inventor(s):

... **CHEE WaiOnn** ...

... **JIERAPIPATANAKUL Niroot**

Main International Patent Class (v7): **G11B-005/48**

File 9:Business & Industry(R) Jul/1994-2006/Sep 22
 (c) 2006 The Gale Group
 File 15:ABI/Inform(R) 1971-2006/Sep 25
 (c) 2006 ProQuest Info&Learning
 File 16:Gale Group PROMT(R) 1990-2006/Sep 22
 (c) 2006 The Gale Group
 File 20:Dialog Global Reporter 1997-2006/Sep 25
 (c) 2006 Dialog
 File 47:Gale Group Magazine DB(TM) 1959-2006/Sep 22
 (c) 2006 The Gale group
 File 75:TGG Management Contents(R) 86-2006/Sep W3
 (c) 2006 The Gale Group
 File 80:TGG Aerospace/Def.Mkts(R) 1982-2006/Sep 22
 (c) 2006 The Gale Group
 File 88:Gale Group Business A.R.T.S. 1976-2006/Sep 22
 (c) 2006 The Gale Group
 File 98:General Sci Abs 1984-2006/Sep
 (c) 2006 The HW Wilson Co.
 File 112:UBM Industry News 1998-2004/Jan 27
 (c) 2004 United Business Media
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 275:Gale Group Computer DB(TM) 1983-2006/Sep 22
 (c) 2006 The Gale Group
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 (c) 2006 Dialog
 File 484:Periodical Abs Plustext 1986-2006/Sep W3
 (c) 2006 ProQuest
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 (c) 2006 The HW Wilson Co
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 (c) 2006 The Gale Group
 File 620:EIU:Viewswire 2006/Sep 23
 (c) 2006 Economist Intelligence Unit
 File 621:Gale Group New Prod.Annou.(R) 1985-2006/Sep 22
 (c) 2006 The Gale Group
 File 623:Business Week 1985-2006/Sep 22
 (c) 2006 The McGraw-Hill Companies Inc
 File 624:McGraw-Hill Publications 1985-2006/Sep 22
 (c) 2006 McGraw-Hill Co. Inc
 File 634:San Jose Mercury Jun 1985-2006/Sep 22
 (c) 2006 San Jose Mercury News
 File 635:Business Dateline(R) 1985-2006/Sep 20
 (c) 2006 ProQuest Info&Learning
 File 636:Gale Group Newsletter DB(TM) 1987-2006/Sep 22
 (c) 2006 The Gale Group
 File 647:CMP Computer Fulltext 1988-2006/Nov W2
 (c) 2006 CMP Media, LLC
 File 696:DIALOG Telecom. Newsletters 1995-2006/Sep 22
 (c) 2006 Dialog
 File 674:Computer News Fulltext 1989-2006/Sep W1
 (c) 2006 IDG Communications
 File 810:Business Wire 1986-1999/Feb 28
 (c) 1999 Business Wire
 File 813:PR Newswire 1987-1999/Apr 30
 (c) 1999 PR Newswire Association Inc
 File 587:Jane's Defense&Aerospace 2006/Sep W3
 (c) 2006 Jane's Information Group

Set	Items	Description
S1	750039	(MAGNETIC OR DATA) (3N) STORAGE OR HDD OR HARD() (DISC?? OR D-

```

ISK??)()DRIVE?? OR (DISC OR DISK OR HARD)()DRIVE?? OR DSD OR
DATA()STORAGE()DEVICE??
S2      5570 (BASE OR DECK OR CHASSIS OR PLATFORM OR PLATE??)(3N)S1
S3      139326 PRINTED()CIRCUIT()BOARD?? OR PCB
S4      50762 (STAMP?? OR (PROJECTION OR INJECTION OR OVER)()MOLD??? OR -
EXTRUSION OR EXTRUD?)(3N)(METAL??? OR ELASTOMER? OR PLASTIC??
OR ELASTIC OR POLYMER? OR RESILIENT OR FLEXIBL?? OR COMPOSITE-
??)
S5      401 (RIGID? OR HARD? OR STIFF??? OR MODULUS(2N)(RIGID? OR ELAS-
TIC?))(3N)S4
S6      20 AU=(CHEE, W? OR CHEE W? OR JIERAPIPATANAKUL, N? OR JIERAPI-
PATANAKUL N? OR NG, Q? OR NG Q? )
S7      10980 VCM OR VOICE()COIL(3N)(MOTOR OR REGION OR AREA)
S8      476 (MOTOR OR ACTUATOR)(3N)(APERTURE OR DEPRESS? OR RAISED()SU-
RFACE OR INDENT?)
S9      0 S2(3N)(S4 OR S5)
S10     0 S2(60N)(S4 OR S5)
S11     2 S2(40N)(S7 OR S8)
S12     496 (BASE OR DECK OR CHASSIS OR PLATFORM OR PLATE??)(3N)(S4 OR
S5)
S13     1 S12(3N)S1
S14     1 S13 NOT S11
S15     4 S12(20N)S1
S16     3 S15 NOT (S11 OR S14)
S17     2 RD (unique items)
S18     0 S12(20N)(S7 OR S8)
S19     0 S12 AND S6

```


11/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2006 The Gale Group. All rts. reserv.

07874435 Supplier Number: 65646446
SINGAPORE: CHEUNG WOH TECHNOLOGIES TO BE LISTED.
Straits Times, p75
Sept 12, 2000
Language: English Record Type: Abstract
Document Type: Magazine/Journal; Trade

ABSTRACT:
...a Sesdaq listing. The company, which currently supplies about 30% of the global market for **voice coil motor (VCM) plates** from the **disk drive** industry, is likely to launch its initial public offer in Singapore by end-September 2000. Apart from making **VCM** plates in Singapore and Johor, Malaysia, Cheung Woh Technologies is also involved in precision metal...

11/3,K/2 (Item 1 from file: 20)
DIALOG(R)File 20:Dialog Global Reporter
(c) 2006 Dialog. All rts. reserv.

26066760 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Cheung Woh Technologies to list on the Singapore Exchange
AFX ASIA (FOCUS)
November 15, 2002
JOURNAL CODE: WAXA LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 58

...with the Monetary Authority of Singapore.
Cheung Woh Technologies is engaged in the manufacturing of **voice coil motor (VCM) plates** for the **hard disk drive** industry, precision metal stamping services and precision tool and die making.

14/3,K/1 (Item 1 from file: 20)
DIALOG(R)File 20:Dialog Global Reporter
(c) 2006 Dialog. All rts. reserv.

31962011 (USE FORMAT 7 OR 9 FOR FULLTEXT)
High-capacity single-drive storage, NEW STRAITS TIMES-MANAGEMENT TIM ES
WORLD SOURCES (ENGLISH)
October 27, 2003
JOURNAL CODE: WWOS LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 731

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... heat-conductive pad is the only point of contact from the spindle motor on the **hard drive** to the **stamped metal chassis**.

While Maxtor claims that heat dissipation from the hard drive to the external aluminium enclosure...

17/3,K/1 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01056160 97-05554

Gig drives break \$500 barrier

Feeley, Jim

Macworld v12n8 PP: 36-37 Aug 1995

ISSN: 0741-8647 JRNL CODE: MAW

WORD COUNT: 350

...TEXT: and still make their price points, drive makers want to reduce the cost of stationary **hard drive** parts. Quantum's 420MB and 850MB Trailblazer drives, for example, use a **stamped - metal base**, rather than the cast-metal base used by most modern drives. Quantum says using a ...

17/3,K/2 (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)
(c) 2006 The Gale group. All rts. reserv.

04308220 SUPPLIER NUMBER: 17240688 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Gig drives break \$500 barrier. (inexpensive storage space, cheaper hardware) (Brief Article)

Feeley, Jim

Macworld, v12, n8, p36(2)

August, 1995

DOCUMENT TYPE: Brief Article

ISSN: 0741-8647

LANGUAGE: English

RECORD TYPE: Fulltext

WORD COUNT: 389 LINE COUNT: 00034

... and still make their price points, drive makers want to reduce the cost of stationary **hard drive** parts. Quantum's 420MB and 850MB Trailblazer drives, for example, use a **stamped - metal base**, rather than the cast-metal base used by most modern drives. Quantum says using a